

Title (en)

Mutations in OAS1 genes

Title (de)

MUTATIONEN IN OAS1 GENEN

Title (fr)

MUTATIONS DANS DES GENES OAS1

Publication

EP 2295552 A2 20110316 (EN)

Application

EP 10183486 A 20060503

Priority

- EP 06758989 A 20060503
- US 67768005 P 20050504

Abstract (en)

Modified amino acid sequences of OAS 1 proteins in non-human primates, and genes related thereto, are provided.

IPC 8 full level

C12N 9/12 (2006.01); **A61K 38/16** (2006.01); **C12Q 1/68** (2006.01)

CPC (source: CN EP KR US)

A61P 31/04 (2017.12 - EP); **A61P 31/12** (2017.12 - EP); **A61P 31/14** (2017.12 - EP); **A61P 31/16** (2017.12 - EP); **A61P 31/18** (2017.12 - EP);
A61P 31/20 (2017.12 - EP); **A61P 31/22** (2017.12 - EP); **A61P 35/00** (2017.12 - EP); **C07K 14/00** (2013.01 - KR);
C12N 9/1077 (2013.01 - CN EP KR US); **C12N 9/1241** (2013.01 - CN EP US); **C12N 9/88** (2013.01 - CN EP KR US); **C12N 15/09** (2013.01 - KR);
C12Q 1/6883 (2013.01 - CN EP KR US); **A61K 38/00** (2013.01 - CN); **C12Q 2600/156** (2013.01 - CN EP US); **Y02A 50/30** (2017.12 - EP)

Citation (applicant)

- US 97213504 A 20041022
- US 5514758 A 19960507 - MULLER PASCALE F J [FR], et al
- US 5565552 A 19961015 - MAGDA DARREN [US], et al
- US 5567810 A 19961022 - WEIS ALEXANDER L [US], et al
- US 5574142 A 19961112 - MEYER JR RICH B [US], et al
- US 5585481 A 19961217 - ARNOLD JR LYLE J [US], et al
- US 5587371 A 19961224 - SESSLER JONATHAN L [US], et al
- US 5597696 A 19970128 - LINN C PRESTON [US], et al
- US 5958773 A 19990928 - MONIA BRETT P [US], et al
- US 4946778 A 19900807 - LADNER ROBERT C [US], et al
- WO 9420069 A1 19940915 - AMGEN INC [US]
- US 5915378 A 19990629 - LLOYD LESTER J [US], et al
- US 5960792 A 19991005 - LLOYD LESTER J [US], et al
- US 5957124 A 19990928 - LLOYD LESTER J [US], et al
- US 5934272 A 19990810 - LLOYD LESTER J [US], et al
- US 5855564 A 19990105 - RUSKEWICZ STEPHEN J [US]
- US 5826570 A 19981027 - GOODMAN DAVID E [US], et al
- US 5522385 A 19960604 - LLOYD LESTER J [US], et al
- US 5997848 A 19991207 - PATTON JOHN S [US], et al
- US 5993783 A 19991130 - ELJAMAL MOHAMMED [US], et al
- US 5985248 A 19991116 - GORDON MARC S [US], et al
- US 5976574 A 19991102 - GORDON MARC S [US]
- US 5922354 A 19990713 - JOHNSON KEITH A [US], et al
- US 5785049 A 19980728 - SMITH ADRIAN E [US], et al
- US 5654007 A 19970805 - JOHNSON KEITH A [US], et al
- US 5876969 A 19990302 - FLEER REINHARD [FR], et al
- US 4683202 A 19870728 - MULLIS KARY B [US]
- US 5426039 A 19950620 - WALLACE ROBERT B [US], et al
- WO 9324640 A2 19931209 - UNIV CALIFORNIA [US], et al
- US 5641662 A 19970624 - DEBS ROBERT JAMES [US], et al
- US 5279833 A 19940118 - ROSE JOHN K [US]
- WO 9106309 A1 19910516 - UNIV VANDERBILT [US]
- US 4683192 A 19870728 - NISHIYAMA SHINGO [JP]
- US 4800159 A 19890124 - MULLIS KARY B [US], et al
- US 4965188 A 19901023 - MULLIS KARY B [US], et al
- WO 2006119363 A2 20061109 - ILLUMIGEN BIOSCIENCES INC [US], et al
- ALTER; MOYER, J. ACQUIR. IMMUNE DEFIC. SYNDR. HUM RETROVIROL., vol. 18, no. 1, 1998, pages 6 - 10
- HOVANESSIAN ET AL., EMBO, vol. 6, 1987, pages 1273 - 1280
- MARIE ET AL., BIOCHEM. BIOPHYS. RES. COMMUN., vol. 160, 1989, pages 580 - 587
- MARIE; HOVANESSIAN, J BIOL. CHEM., vol. 267, 1992, pages 9933 - 9939
- HOVANIAN ET AL., GENOMICS, vol. 52, 1998, pages 267 - 277
- ESKILDSEN ET AL., NUC. ACIDS RES., vol. 31, 2003, pages 3166 - 3173
- KAKUTA ET AL., J. INTERFERON & CYTOKINE RES, vol. 22, 2002, pages 981 - 993
- RYSER; HANCOCK, SCIENCE, vol. 150, no. 695, 22 October 1965 (1965-10-22), pages 50L - 3
- KOHLER; MILSTEIN, NATURE, vol. 256, 1975, pages 495 - 597
- KOZBOR ET AL., IMMUNOLOGY TODAY, vol. 4, 1983, pages 72
- COE ET AL.: "Monoclonal Antibodies and Cancer Therapy", 1985, ALAN R. LISS, INC., pages: 77 - 96
- "Remington's Pharmaceutical Sciences", 1990, MACK PUBLISHING CO., pages: 1435 - 1712
- "Remington's Pharmaceutical Sciences", 1990, MACK PUBLISHING COMPANY
- "Pharmaceutical Formulation Development of Peptides and Proteins", 2000, TAYLOR & FRANCIS
- "Handbook of Pharmaceutical Excipients", 2000, PHARMACEUTICAL PRESS

- CHALLITA-EID, P., J. IMMUNOL, vol. 160, 1998, pages 3419 - 3426
- STURMHOEFEL, K. ET AL., CANCER RES, vol. 59, 1999, pages 4964 - 4972
- BEAUCAGE ET AL., TETRAHEDRON LETTERS, vol. 22, 1981, pages 1859 - 69
- MATTHES ET AL., EMBO J, vol. 3, 1984, pages 801 - 05
- BERGER; KIMMEL: "Guide to Molecular Cloning Techniques, Methods in Enzymol.", vol. 152, ACAD. PRESS, INC.
- J. SAMBROOK; D.W. RUSSELL: "Molecular Cloning: A Laboratory Manual", COLD SPRING HARBOR PRESS
- F.M. AUSUBEL ET AL.: "Current Protocols in Molecular Biology", 1987, WILEY INTERSCIENCE
- STEWART ET AL.: "Solid-Phase Peptide Synthesis", 1969, WH FREEMAN CO
- MERRIFIELD J., JAM CHEM SOC, vol. 85, 1963, pages 2149 - 2154
- "PCR Protocols: A Guide to Methods and Applications", 1990, ACADEMIC PRESS INC.
- ARNHEIM; LEVINSON, C&EN, 1 October 1990 (1990-10-01), pages 36 - 47
- THE JOURNAL OF NIH RESEARCH, vol. 3, 1991, pages 81 - 94
- KWON ET AL., PROC NATL ACAD SCI USA, vol. 86, 1989, pages 1173 - 1177
- GUATELLI ET AL., PROC NATL ACAD SCI USA, vol. 87, 1990, pages 1874 - 1878
- LOMELI ET AL., J CLIN CHEM, vol. 35, 1989, pages L826 - 1831
- LANDEGREN ET AL., SCIENCE, vol. 241, 1988, pages 1077 - 1080
- VAN BRUNT, BIOTECHNOLOGY, vol. 8, 1990, pages 291 - 294
- WU; WALLACE, GENE, vol. 4, 1989, pages 560 - 569
- BARRINGER ET AL., GENE, vol. 89, 1990, pages 117 - 122
- SOOKNANAN; MALEK, BIOTECHNOLOGY, vol. 13, 1995, pages 563 - 564
- CHENG ET AL., NATURE, vol. 369, 1994, pages 684 - 685
- LOGAN; SHENK, PROC NATLACAD SCI USA, vol. 81, 1984, pages 3655 - 3659
- SCHARFD. ET AL., RESULTS PROBL CELL DIFFER, vol. 20, 1994, pages 125 - 62
- BITTNER ET AL., METHODS IN ENZYMOLOGY, vol. 153, 1987, pages 516 - 544
- DAVIS, L.; DIBNER, M.; BATTEY, I., BASIC METHODS IN MOLECULAR BIOLOGY, 1986
- FRESHNEY: "Culture of Animal Cells, a Manual of Basic Technique", 1994, WILEY-LISS
- DOYLE; URITTITHÉ: "Mammalian Cell Culture: Essential Techniques", 1997, JOHN WILEY AND SONS
- HUMASON: "Animal Tissue Techniques", 1979, W.H. FREEMAN AND COMPANY
- RICCIARDELLI ET AL., CELL, vol. 25, 1989, pages 1016 - 1024
- PAYNE ET AL.: "Plant Cell and Tissue Culture in Liquid Systems", 1992, JOHN WILEY & SONS, INC.
- "Plant Cell, Tissue and Organ Culture; Fundamental Methods Springer Lab Manual", 1995, SPRINGER-VERLAG
- "Plant Molecular Biology", 1993, BIOS SCIENTIFIC PUBLISHERS
- "The Handbook of Microbiological Media", 1993, CRC PRESS
- SANDANA: "Bioseparation of Proteins", 1997, ACADEMIC PRESS
- BOLLAG ET AL.: "Protein Methods", 1996, WILEY-LISS
- WALKER: "The Protein Protocols Handbook", 1996, HUMANA PRESS
- HARRIS; ANGAL: "Protein Purification Applications: A Practical Approach", 1990, IRL PRESS AT OXFORD
- HARRIS; ANGAL: "Protein Purification Methods: A Practical Approach", IRL PRESS AT OXFORD
- SCOPES: "Protein Purification: Principles and Practice", 1993, SPRINGER VERLAG
- JANSON; RYDEN: "Protein Purification: Principles, High Resolution Methods and Applications", 1998, WILEY-VCH
- WALKER: "Protein Protocols on CD-ROM", 1998, HUMANA PRESS
- MILLER, CURR TOP MICROBIOL IMMUNOL, vol. 158, 1992, pages 1 - 24
- SALMONS; GUNZBURG, HUMAN GENE THERAPY, vol. 4, 1993, pages 129 - 141
- MILLER ET AL., METHODS IN ENZYMOLOGY, vol. 217, 1994, pages 581 - 599
- CARTER, CURR OPINION BIOTECH, vol. 3, 1992, pages 533 - 539
- MUZCYZKA, CURR TOP MICROBIAL IMMUNOL., vol. 158, 1992, pages 97 - 129
- JOLLY, CANCER GENE THERAPY, vol. 1, 1994, pages 51 - 64
- LATCHMAN, MOLEC BIOTECHNOL, vol. 2, 1994, pages 179 - 195
- JOHANNING ET AL., NUCL ACIDS RES, vol. 23, 1995, pages 1495 - 1501
- BERENCSI ET AL., J INFECT DIS, vol. 183, no. 8, 2001, pages 1171 - 9
- ROSENWIRTH ET AL., VACCINE, vol. 19, no. 13-14, 8 February 2001 (2001-02-08), pages 1661 - 70
- KITTELESEN ET AL., J IMMUNOL, vol. 164, no. 8, 2000, pages 4204 - 11
- BROWN ET AL., GENE THER, vol. 7, no. 19, 2000, pages 1680 - 9
- KANESA-THASAN ET AL., VACCINE, vol. 19, no. 4-5, 2000, pages 483 - 91
- STEN, DRUG, vol. 60, no. 2, 2000, pages 249 - 71
- MANNINO; GOULD-FOGERITE, BIOTECHNIQUES, vol. 6, no. 7, 1988, pages 682 - 691
- FELGNER ET AL., PROC NATLACAD SCI USA, vol. 84, 1987, pages 7413 - 7414
- BRIGHAM ET AL., AM J MED SCI, vol. 298, 1989, pages 278 - 281
- NABEL ET AL., SCIENCE, vol. 249, 1990, pages 1285 - 1288
- HAZINSKI ET AL., AM J RESP CELL MOLEC BIOL, vol. 4, 1991, pages 206 - 209
- WANG; HUANG, PROC NATL ACAD SCI USA, vol. 84, 1987, pages 7851 - 7855
- CHEN ET AL., PROC NATL ACAD SCI USA, vol. 91, 1994, pages 3054 - 3057
- TONG ET AL., GYNECOL ONCOL, vol. 61, 1996, pages 175 - 179
- CLAYMAN ET AL., CANCER RES, vol. 5, 1995, pages 1 - 6
- O'MALLEY ET AL., CANCER RES, vol. 55, 1995, pages 1080 - 1085
- HWANG ET AL., AM J RESPIR CELL MOL BIOL, vol. 13, 1995, pages 7 - 16
- HADDADA ET AL., CURR TOP MICROBIOL IMMUNOL., vol. 1995, 1995, pages 297 - 306
- ADDISON ET AL., PROC NATL ACAD SCI USA, vol. 92, 1995, pages 8522 - 8526
- COLAK ET AL., BRAIN RES, vol. 691, 1995, pages 76 - 82
- CRYSTAL, SCIENCE, vol. 270, 1995, pages 404 - 410
- ELSHAMY ET AL., HUMAN GENE THER, vol. 7, 1996, pages 141 - 148
- VINCENT ET AL., J NEUROSURG, vol. 85, 1996, pages 648 - 654
- MILLER ET AL., MOL CELL BIOL, vol. 10, 1990, pages 4239
- KOLBERG, J NIH RES, vol. 4, 1992, pages 43
- COMETTA ET AL., HUM GENE THER, vol. 2, 1991, pages 215
- WU; WU, JBIOL CHEM, vol. 263, 1988, pages 14621 - 14624
- WOLFF ET AL., SCIENCE, vol. 247, 1990, pages 1465 - 1468
- ROBBINS: "Gene Therapy Protocols", 1996, HUMANA PRESS
- JOYNER: "Gene Targeting: A Practical Approach", 1993, IRL PRESS
- CREIGHTON: "Proteins", 1984, W.H. FREEMAN AND COMPANY
- JUSTESEN, J. ET AL., NUC ACIDS RES., vol. 8, 1980, pages 3073 - 3085
- BLIGHT, KJ. ET AL., J. VIROLOGY, vol. 76, 2002, pages 13001 - 13014
- CHOMEZYNSKI ET AL., ANAL. BIOCHEM., vol. 162, 1987, pages 156 - 159

- "DNA Amplification", 1989, STOCKTON PRESS
- "PCR Protocols: A Guide to Methods and Applications", 1990, ACADEMIC PRESS

Citation (examination)

GHOSH S K ET AL: "Cloning, sequencing, and expression of two murine 2'-5'-oligoadenylate synthetases. Structure-function relationships", JOURNAL OF BIOLOGICAL CHEMISTRY, AMERICAN SOCIETY FOR BIOCHEMISTRY AND MOLECULAR BIOLOGY, US, vol. 266, no. 23, 15 August 1991 (1991-08-15), pages 15293 - 15299, XP002622550, ISSN: 0021-9258

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

WO 2006119363 A2 20061109; WO 2006119363 A3 20070531; AU 2006242152 A1 20061109; AU 2006242152 B2 20111103;
BR PI0611454 A2 20100908; CA 2607575 A1 20061109; CN 101203604 A 20080618; CN 103642898 A 20140319;
EP 1877550 A2 20080116; EP 2295552 A2 20110316; EP 2295552 A3 20110706; EP 2314675 A2 20110427; EP 2314675 A3 20110907;
EP 2314675 B1 20150408; EP 2860246 A1 20150415; HK 1209454 A1 20160401; IL 187079 A0 20080209; IL 187079 A 20150630;
JP 2009504135 A 20090205; JP 5303728 B2 20131002; KR 101476844 B1 20150102; KR 20080011423 A 20080204;
KR 20130084323 A 20130724; KR 20140109510 A 20140915; MX 2007013765 A 20080129; NO 20076126 L 20080130;
NZ 563785 A 20110225; PH 12014500829 A1 20160118; RU 2007144986 A 20090610; RU 2012132651 A 20140210;
RU 2465328 C2 20121027; SG 10201502945P A 20150528; SG 175656 A1 20111128; UA 95446 C2 20110810; US 2006275802 A1 20061207;
US 2009291074 A1 20091126; US 2012070424 A1 20120322; US 2013142773 A1 20130606; US 8030046 B2 20111004;
US 8951768 B2 20150210; US 9163222 B2 20151020; ZA 200710521 B 20081126

DOCDB simple family (application)

US 2006016983 W 20060503; AU 2006242152 A 20060503; BR PI0611454 A 20060503; CA 2607575 A 20060503;
CN 200680022089 A 20060503; CN 201310157513 A 20060503; EP 06758989 A 20060503; EP 10183486 A 20060503;
EP 10184942 A 20060503; EP 14189399 A 20060503; HK 15110007 A 20111003; IL 18707907 A 20071101; JP 2008510166 A 20060503;
KR 20077028236 A 20060503; KR 20137015261 A 20060503; KR 20147023680 A 20060503; MX 2007013765 A 20060503;
NO 20076126 A 20071127; NZ 56378506 A 20060503; PH 12014500829 A 20140414; RU 2007144986 A 20060503;
RU 2012132651 A 20120730; SG 10201502945P A 20060503; SG 2011076403 A 20060503; UA A200713492 A 20060503;
US 201113180132 A 20110711; US 201213676928 A 20121114; US 24881008 A 20081009; US 41679006 A 20060503;
ZA 200710521 A 20070101